





# 70th Annual Report The Firestone Tire & Rubber Company 1200 Firestone Parkway, Akron, Ohio 44317

1900-1970

A sign of the times for 70 years has been the familiar Firestone identification. It has changed slightly in appearance over the years, but today is recognized around the world as our corporate symbol of quality and service.



Co	ntents	Financial Highlights 1970	1969
1 2	Financial Highlights Report to Stockholders	Net Sales	\$2,278,909,422
4	Consolidated Balance Sheet	Net Income	116,685,583
6	Consolidated Income Statement, Retained Earnings, Additional Capital	Percent of Sales 4.0%	5.1%
7	Statement of Source and Disposition of Funds, Accountants' Report	Cash Dividends	46,530,484
8	Ten-Year Financial and	Net Income	4.01
10	Operating Summary Five-Year Trends	Cash Dividends	1.60
11	Directors, Officers, Division Presidents	Cash Dividends	3.92
14	Research and Develop- ment		25.52
16	Tires	Book Value	36.62
21 25	Diversified Operations International Operations	Working Capital	728,829,770
28	Meeting Corporate Responsibilities	Current Ratio, Assets to Liabilities 2.3 to 1	2.5 to 1
CO	VER		
the	e original painting on cover pictorially presents Company's three major	Stockholders' Equity	1,064,138,872
divi pro	sions — tires, diversified ducts and international	Wages, Salaries and Employee Benefits. 761,987,780	734,173,165
por	rations. The illustration trays a cross section of estone's varied products	Depreciation	80,548,944
and in r	its interrelated activities esearch, manufacturing marketing.	Expenditures for Property, Plants and Equipment	165,909,438

## **Report to Stockholders**

On behalf of the Board of Directors, we present the consolidated statements of our Company and its subsidiaries for the fiscal year ended October 31, 1970.

#### **OPERATIONS**

Sales reached a record \$2,334,716,568, an increase of 2.4 percent over 1969 sales of \$2,278,909,422.

Net income for the year was \$92,764,332, down from \$116,685,583 in 1969.

Income per share of Common Stock amounted to \$3.20 for 1970 and \$4.01 last year. Common Stock cash dividends continued at \$1.60 per share and amounted to \$46,440,216 for the year.

Net income of foreign subsidiaries was \$36,288,529 compared with \$36,159,166 in 1969. The consolidated balance sheet includes net assets in foreign countries in the amount of \$283,424,748 on October 31, 1970, an increase over the total of \$274,470,848 on October 31, 1969.

Taxes totaled \$333,626,688 consisting of income taxes \$77,850,000; excise taxes \$196,886,585; social security taxes \$30,895,391; and property and miscellaneous taxes \$27,994,712.

Working capital as of October 31, 1970 amounted to \$655,478,417 as compared with \$728,829,770 on the same date in 1969. Long-term debt was \$387,378,330 having been reduced \$29,699,349 during the year. Interest expenses for 1970 amounted to \$39,166,424 compared to \$30,791,650 for 1969.

The past year has been an extremely difficult one in the tire industry. Prolonged strikes and higher wages and employee benefits under a new three-year labor contract contributed to substantial cost increases. A lengthy strike at General Motors, one of our largest customers, affected every area of our business, resulting in reduced shipments of tires with accompanying reductions in synthetic rubber and tire fabric production, of steel products, foam, seat belts, plastics and industrial rubber products. The strike in the trucking industry interrupted business operations and added to our costs.

The deceleration of the economy and higher interest costs also contributed to declining profits. To help overcome these adverse factors, continuing and renewed emphasis was placed on cost and expense controls. Production was curtailed during the fourth quarter to bring inventories into line with current business conditions and capital appropriations were reduced. These actions eliminated the need to go to the capital funds market.

#### CAPITAL EXPENDITURES

Major capital expenditures during the year were directed toward increasing production capabilities in domestic and foreign plants and to achieving

environmental excellence in all our plant operations.

Dayton Tire division's new \$50 million tire plant in Oklahoma City started production operations. This plant, with a capacity of 17,000 tires per day, is one of the most modern in the country and was designed to meet all environmental control standards.

More than \$15 million was expended on a modern foundry building at Electric Wheel Company and for additional production machinery in the Albany, Georgia, tire plant. Other major expenditures were made for modernization of equipment and expansion programs in nearly every domestic and foreign plant.

Approximately \$40 million was spent to enlarge distribution facilities and to expand our retail store operations throughout this country and abroad.

Our network of dealers and stores continued to grow as the Company accelerated its program to secure new outlets and to keep pace with the growing markets for Firestone products.

Capital expenditures increased to \$206,126,694 from last year's total of \$165,909,438. Depreciation also increased to \$90,095,465 from \$80,548,944 provided in 1969. Depreciation for financial reporting purposes is computed principally by the straight line method.

#### **NEW PRODUCTS**

We continued to stress research and development in all areas of our business. New tires announced during the year included the revolutionary liquid-molded, cordless, cast tire; the industry's first steel belted-bias passenger tire; and the Town & Country Asymmetrical winter tire for use on all four wheels of a passenger car.

All divisions of our Company developed and marketed new products including the XL truck wheel, Stereon synthetic rubber, plastic resins, and textiles.

#### **NEW BUSINESS**

A 65 percent interest in Radiation Dynamics, Inc., was acquired by the Company during 1970. RDI in Westbury, New York, is a manufacturer of high energy particle accelerators for use in industrial research and manufacturing. Among potential industrial applications of radiation are instantaneous curing of plastics and rubber compounds; surface coatings and laminations; strengthening of materials; and treatment of solid waste materials.

Acquisition of RDI stock gives Firestone a solid position in basic radiation chemistry and its application to our industry and industry in general.

We have entered into an agreement which permits us to acquire an interest of approximately 25 percent in Drexel Harriman Ripley, Inc., an investment banking and brokerage firm. Under this agreement our interest may be increased to 55 percent in future years.

This investment in a company with which we have

had a long standing relationship provides an opportunity for diversification in the financial field.

#### **PERSONNEL**

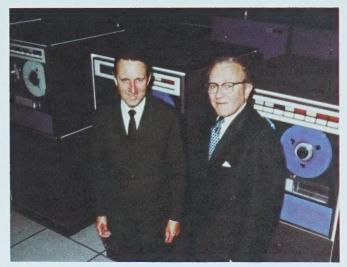
Wages, salaries and employee benefits amounted to \$761,987,780. Included in employee benefits are pension plans covering the majority of our employees. The cost of these plans for the year was \$33,306,836 including amortization of prior service cost over a period of 30 years. Pension costs accrued are being funded by payments to trustees. The actuarially computed value of vested benefits for the plans as of the latest valuation date, exceeded the total of the pension funds by approximately \$137,500,000.

The Company provides incentive compensation for executives and other key employees who, in the opinion of the Incentive Compensation Committee, have made important contributions to the efficient and profitable operation of the Company. The amount available for this purpose is related to the Company's earnings. Part of this amount is distributed in cash and part in Common Stock of the Company purchased on the open market. Employee stock purchase plans, started in 1968, enable employees to invest in Firestone Common Stock through payroll deductions. Stock for this purpose is also obtained by purchases on the open market. Provision for incentive compensation and for the Company's participation in stock purchases by employees resulted in charges to income before tax of \$4,885,000 in 1970.

Under the 1960 Employees' Incentive Stock Option Plan, options to purchase 462,733 shares of Common Stock were outstanding at the beginning of the year. During the year, 1,500,000 additional shares were reserved for options which may be granted under the Employees' Incentive Stock Option Plan of 1970; options for 170,410 shares were granted at \$38.90; options for 61,634 shares were exercised at an average price of \$33.42; and options for 17,646 shares were cancelled. At October 31, 1970, options for 553,863 shares at an average price of \$45.04 were outstanding and 1,330,690 shares were reserved for additional options which may be granted subsequently.

It is with deep regret that we report the untimely death of Roger S. Firestone on January 26, 1970. The voungest of the five sons of the founder of the Company, Mr. Firestone had served the Company since 1936. He had been on the Board of Directors since 1945 and president of the Firestone Plastics Company since 1947.

At the January 17, 1970 stockholders' meeting, Edward F. Carter, Mario A. DiFederico and Richard A. Riley, all vice presidents, were elected to the Board of Directors. Elton H. Schulenberg, a director for 10 years, retired from the board, and Herbert H. Wiedenmann



Raymond C. Firestone (left), Chairman and Chief Executive Officer, and Robert D. Thomas, President

retired as vice president, tire production.

Robert D. Thomas was elected president of the Company succeeding Earl B. Hathaway, who retired from that post. Mr. Hathaway, who had 43 years of loyal and effective service, continues to serve on the Board of Directors and on the executive committee.

Mr. Thomas, a veteran in the tire industry, became the eighth president to serve the Company since its founding in 1900. He has been on the Board of Directors and executive vice president since 1966.

To further strengthen and balance the management organization, Mr. Carter was appointed vice president, sales, and Mr. DiFederico vice president, tire production. The following were named to new posts: Elden H. Eaton, vice president, investments; Allen E. Brubaker, vice president, advertising and public relations; Donald W. Olson, vice president, trade sales; and Kenneth W. Reese, treasurer.

On October 31, 1970, Leonard K. Firestone announced his retirement as president of the Firestone Tire & Rubber Company of California. He started his long association with the Company in 1931 and has served wisely and effectively in various sales and executive posts. He has been a director since 1939 and will continue to serve on the board.

We extend our sincere appreciation to our thousands of loyal employees and dealers for the effective contributions they continue to make to the growth of the Company. With their support and dedication we will move forward in 1971 and capitalize on business opportunities in our industry both at home and abroad.

Respectfully submitted,

Chairman

Robert D. Human

December 15, 1970

## The Firestone Tire & Rubber Company

## **Consolidated Balance Sheet**

OCTOBER 31, 1970 AND 1969

Assets	1970	1969
Current Assets  Cash, Including Time Deposits for Foreign Projects:  1970—\$57,385,418 and 1969—\$60,516,164  Short-Term Investments, at Cost  Accounts and Notes Receivable, Less Allowances Inventories, at Lower of Average Cost or Market  Raw Materials and Supplies In-Process Products Finished Goods  Total Inventories  Total Current Assets	\$ 109,156,543 — 503,284,062 \$ 116,078,156 39,389,930 411,668,105 \$ 567,136,191 \$1,179,576,796	\$ 106,557,303 64,541,307 467,198,552 \$ 140,848,067 44,705,644 377,851,549 \$ 563,405,260 \$1,201,702,422
Other Assets  Funds Held by Trustees for Domestic Plant Construction Investments, at Cost and Miscellaneous Assets  Prepaid Expenses and Deferred Charges	\$ — 29,193,391 10,327,910 \$ 39,521,301	\$ 9,902,664 30,587,159 12,199,635 \$ 52,689,458
Property, Plants and Equipment, at Cost  Land and Improvements  Buildings and Building Fixtures  Machinery and Equipment  Less: Accumulated Depreciation  Total Assets	\$ 60,414,622 340,149,835 1,133,538,263 \$1,534,102,720 656,126,357 \$ 877,976,363 \$2,097,074,460	\$ 43,128,256 292,863,704 1,030,660,769 \$1,366,652,729 601,788,399 \$ 764,864,330 \$2,019,256,210

Current Liabilities		
Short-Term Loans	\$ 138,827,896 257,780,663 30,211,915 97,277,905 \$ 524,098,379	\$ 108,685,297 245,194,014 27,434,216 91,559,125 \$ 472,872,652
Long-Term Debt	\$ 524,090,379	\$ 4/2,0/2,032
Debentures, Less Principal Amount Held in Treasury: 1970—\$14,777,000 and 1969—\$13,986,000		
25/8 % Due January 1, 1972 31/4 % Due May 1, 1977 41/4 % Due July 1, 1988  Domestic Bank Loans, 51/2 % Industrial Revenue Bonds Due 1972-1992  Foreign Long-Term Loans Due 1972-1990  Euro-Dollar Convertible Debentures, 5% Due May 1, 1988	\$ 1,367,000 32,899,000 64,707,000 65,000,000 92,138,000 71,651,330 59,616,000 \$ 387,378,330	\$ 2,677,000 36,438,000 68,024,000 79,000,000 93,385,000 77,937,679 59,616,000 \$ 417,077,679
Reserves		
Foreign Investments and Other Risks	\$ 2,700,000 47,900,000 \$ 50,600,000	\$ 2,700,000 37,700,000 \$ 40,400,000
Minority Interest in Subsidiary Companies	\$ 27,157,827	\$ 24,767,007
Stockholders' Equity		
Serial Preferred Stock (Cumulative), \$1 Par Value, Voting, Authorized 10,000,000 Shares, None Issued Common Stock, without Par Value, Authorized 60,000,000 Shares (1,884,553 Shares reserved for employees' options and 1,014,740 Shares reserved for conversion of debentures):		
Shares Issued: 1970—29,735,735 and 1969—29,674,101	\$ 61,949,448 185,093,205 899,748,666	\$ 61,821,044 183,161,923 853,424,550
Total	\$1,146,791,319	\$1,098,407,517
Less: Treasury Stock, at Cost: 1970—743,088 Shares and 1969—615,234 Shares	38,951,395	34,268,645
Total Stockholders' Equity Total Liabilities and Stockholders' Equity	\$1,107,839,924 \$2,097,074,460	\$1,064,138,872 \$2,019,256,210

## **Consolidated Income Statement**

FOR THE YEARS ENDED OCTOBER 31, 1970 AND 1969	1970	1969
Net Sales	\$2,334,716,568	\$2,278,909,422
Other Income	24,456,090 \$2,359,172,658	23,005,970 \$2,301,915,392
Less:		
Cost of Goods Sold	\$1,714,756,590	\$1,632,093,015
Selling, Administrative and General Expenses	431,022,234	404,638,541
Interest and Debenture Discount and Expense	39,166,424	30,791,650
Miscellaneous Deductions	1,446,212	2,140,754
Minority Interests in Income of Subsidiary Companies	2,166,866	1,615,849
Domestic and Foreign Taxes on Income (including provision for deferred taxes: 1970—\$10,200,000 and 1969—\$7,800,000)	77,850,000	113,950,000
	\$2,266,408,326	\$2,185,229,809
Net Income	\$ 92,764,332	\$ 116,685,583
Per Share of Common Stock	\$3.20	\$4.01 ——
Retained Earnings	1970	1969
Balance at Beginning of Year	\$ 853,424,550	\$ 783,269,451
Net Income for the Year	92,764,332	116,685,583
	\$ 946,188,882	\$ 899,955,034
Cash Dividends Paid on Common Stock		
\$1.60 per Share in 1970 and 1969	46,440,216	46,530,484
Balance at End of Year	\$ 899,748,666	\$ 853,424,550 ===================================
Additional Capital	1970	1969
·		
Balance at Beginning of Year  Excess of Proceeds over Stated Value from Sales of	\$ 183,161,923	\$ 177,540,817
Common Stock Under the Incentive Stock Option Plan	1,931,282	5,621,106
Balance at End of Year	\$ 185,093,205	\$ 183,161,923

## Statement of Source and Disposition of Funds

Purchase of Treasury Stock .....

Additional Working Capital .....

FOR THE	YEARS	ENDED	OCTOBER	31,	1970	AND	1969
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Source of Funds		
Operations		
Net Income	\$ 92,764,332	\$116,685,583
Depreciation	90,095,465	80,548,944
Deferred Income Tax	10,200,000	7,800,000
Total from Operations	\$193,059,797	\$205,034,527
Long-Term Debt	_	11,001,481
Trustees of Funds for Domestic Plant Construction	9,902,664	29,895,722
Sale of Common Stock Under the Incentive Stock Option Plan	2,059,686	5,937,015
Minority Interest in Subsidiary Companies	2,390,820	1,938,485
Working Capital	73,351,353	_
Other Items	6,184,689	5,030,870
Total	\$286,949,009	\$258,838,100
Disposition of Funds		
Payment of Cash Dividends	\$ 46,440,216	\$ 46,530,484
Expenditures for Property, Plants and Equipment	206,126,694	165,909,438
Long-Term Debt	29,699,349	_

## Accountants' Report

To the Board of Directors and Stockholders, The Firestone Tire & Rubber Company: We have examined the consolidated balance sheet of The Firestone Tire & Rubber Company and subsidiary companies as of October 31, 1970 and the related statements of income, retained earnings, additional capital and source and disposition of funds for the year then ended. Our examination was made in accordance with generally accepted auditing standards, and accordingly included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances. We previously examined and reported on the consolidated financial state-

ments of the Company and subsidiaries for the year ended October 31, 1969.

4,682,750

\$286,949,009

Total

22,432,574

23,965,604

\$258,838,100

In our opinion, the above-mentioned consolidated financial statements, together with the related information contained in the company's Report to Stockholders, present fairly the consolidated financial position of The Firestone Tire & Rubber Company and subsidiary companies at October 31, 1970 and 1969, and the consolidated results of their operations and the source and disposition of funds for the years then ended, in conformity with generally accepted accounting principles applied on a consistent basis.

Cleveland, Ohio December 7, 197 Lybrand, Ross Bros. & Montgomery

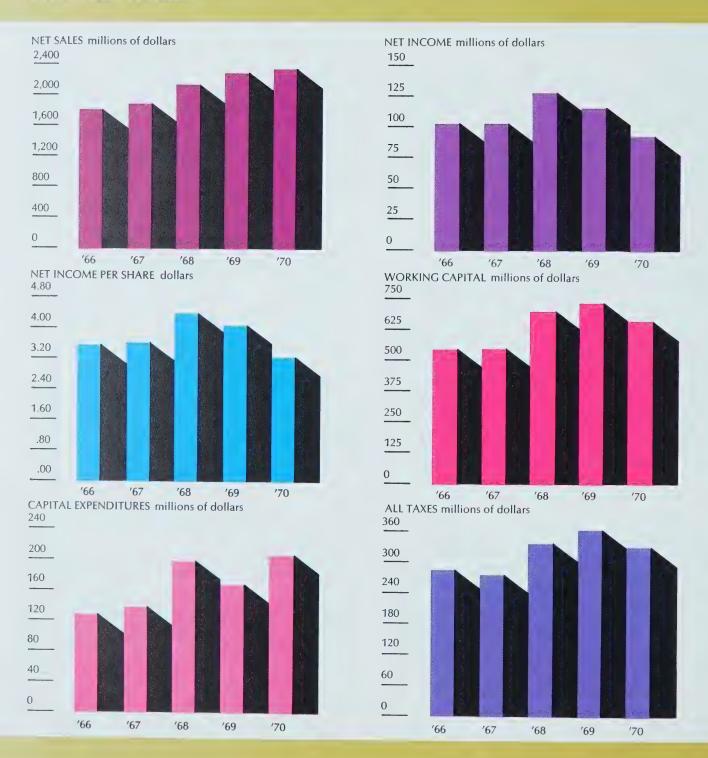
## **Ten-Year Financial and Operating Summary**

DOLLARS IN THOUSANDS	1970	1969	1968	1967
SALES AND EARNINGS				
Net Sales	\$2,334,717	\$2,278,909	\$2,131,444	\$1,875,376
Net Income	\$ 92,764	\$ 116,686	\$ 127,035	\$ 102,349
Percent to Sales	4.0%	5.1%	6.0%	5.5%
Retained Earnings	\$ 46,324	\$ 70,156	\$ 84,536	\$ 61,910
Wages, Salaries and Employee Benefits	\$ 761,988	\$ 734,173	\$ 656,670	\$ 544,831
Taxes	\$ 333,627	\$ 363,706	\$ 339,162	\$ 275,231
Depreciation	\$ 90,095	\$ 80,549	\$ 72,482	\$ 66,645
COMMON STOCK Stockholders' Equity	\$1,107,840	\$1,064,139	\$1,010,479	\$ 915,281
Cash Dividends	\$ 46,440	\$ 46,530	\$ 42,499	\$ 40,439
Per Share	Ψ 10,110	Ψ 10,330	Ψ 12,133	Ψ 10,155
Net Income*	\$3.20	\$4.01	\$4.32	\$3.53
Dividends—Cash	\$1.60	\$1.60	\$1.45	\$1.40
—Stock			_	_
Income Tax*	\$2.68	\$3.92	\$4.07	\$2.94
Book Value	\$38.21	\$36.62	\$34.48	\$31.55
Shares Outstanding	28,992,647	29,058,867	29,304,848	29,007,876
Number of Stockholders	35,841	35,402	34,218	27,168
			0.0	
FINANCIAL POSITION				
Total Assets	\$2,097,074	\$2,019,256	\$1,882,646	\$1,550,402
Working Capital	\$ 655,478	\$ 728,830	\$ 704,864	\$ 558,387
Current Ratio, Assets to Liabilities	2.3 to 1	2.5 to 1	2.7 to 1	2.6 to 1
Property, Plants and Equipment				
Net Value at Year End	\$ 877,976	\$ 764,864	\$ 683,092	\$ 559,739
Additions During Year	\$ 206,127	\$ 165,909	\$ 199,088	\$ 139,945
Long-Term Debt	\$ 387,378	\$ 417,078	\$ 406,076	\$ 237,246

<sup>\*</sup>Based on Average Number of Shares Outstanding Adjusted for Stock Dividends.

1966	1993	1960	1965	1962	1961
\$1,814,592	\$1,609,756	\$1,448,830	\$1,382,049	\$1,277,691	\$1,182,695
\$ 101,765	\$ 86,667	\$ 79,030	\$ 63,384	\$ 60,034	\$ 63,629
5.6%	5.4%	5.5%	4.6%	4.7%	5.4%
\$ 64,336	\$ 52,191	\$ 47,469	\$ 35,303	\$ 32,503	\$ 36,646
\$ 530,880	\$ 471,858	\$ 417,179	\$ 400,984	\$ 369,434	\$ 329,479
\$ 283,413	\$ 245,527	\$ 232,585	\$ 213,441	\$ 198,619	\$ 169,486
\$ 62,025	\$ 54,960	\$ 54,207	\$ 52,452	\$ 50,271	\$ 49,067
\$ 849,242	\$ 782,658	\$ 728,094	\$ 678,885	\$ 643,292	\$ 610,195
\$ 37,429	\$ 34,475	\$ 31,560	\$ 28,080	\$ 27,531	\$ 26,983
\$3.52	\$3.01	\$2.75	\$2.21	\$2.09	\$2.22
\$1.30	\$1.20	\$1.10	\$1.00	\$1.00	\$1.00
	-		2%	2%	2%
\$2.85	\$2.36	\$2.56	\$2.43	\$2.23	\$2.20
\$29.40	\$27.16	\$25.33	\$23.66	\$22.43	\$21.29
28,884,400	28,817,237	28,743,293	28,688,907	28,117,506	27,548,361
28,236	28,300	28,631	28,630	26,446	24,202
	****				
\$1,416,740	\$1,259,975	\$1,111,658	\$1,000,284	\$ 930,964	\$ 879,534
\$ 553,108	\$ 498,779	\$ 498,891	\$ 468,914	\$ 392,191	\$ 383,731
2.7 to 1	2.7 to 1	3.2 to 1	3.9 to 1	2.9 to 1	3.1 to 1
\$ 488,029	\$ 429,015	\$ 360,735	\$ 344,289	\$ 302,916	\$ 293,202
\$ 124,652	\$ 126,079	\$ 72,261	\$ 94,854	\$ 62,865	\$ 70,870
\$ 202,777	\$ 156,586	\$ 143,255	\$ 143,213	\$ 72,310	\$ 75,985

## Fire Year Trends



## Directors

Raymond C. Firestone, Chairman

Robert D. Thomas

Robert P. Beasley

Earl B. Hathaway

Leonard K. Firestone

George F. Karch

John F. Floberg

Herbert H. Wiedenmann

Edward F. Carter

Mario A. DiFederico

Richard A. Riley

Harvey S. Firestone, Jr., Honorary Director

#### **Transfer Agents**

First National City Bank, New York The Firestone Tire & Rubber Company, Akron

### Registrars

Bankers Trust Company, New York The Firestone Bank, Akron

#### **Auditors**

Lybrand, Ross Bros. & Montgomery

## Officers

Raymond C. Firestone, Chairman and Chief Executive Officer

Robert D. Thomas, President

Robert P. Beasley, Executive Vice President

Allen E. Brubaker, Vice President

John T. Cahoon, Vice President

Joseph V. Cairns, Vice President

Edward F. Carter, Vice President

Mario A. DiFederico, Vice President

Elden H. Eaton, Vice President

John F. Floberg, Vice President, Secretary and General Counsel

George D. Hitler, Vice President

Donald W. Olson, Vice President

Richard A. Riley, Vice President

Norman Smith, Vice President

Arthur N. Stuart, Vice President

Kenneth W. Reese, Treasurer

John G. Stoneburner, Comptroller

Robert E. Linder,

Assistant Treasurer

Reid J. Montgomery, Assistant Treasurer

Stanley M. Clark,

Assistant Secretary

Henry L. Houst, Assistant Secretary

Ian R. MacLeod, Assistant Secretary

Harold J. Brandenburg, Assistant Comptroller

Richard C. Clevenger,

Assistant Comptroller

Alexander J. McNair, Assistant Comptroller

John K. Smucker,

Assistant Comptroller

John B. Welsh, Assistant Comptroller

William J. Boyd, Xylos Rubber Company

Leon R. Brodeur, Firestone Foam **Products Company** 

James B. Call, Firestone Textiles Company

Jack M. Cornely, Firestone Plastics Company

James L. Cumming, The Seiberling Tire & Rubber Company

Richard F. deLima, Firestone International Company

Leonard K. Firestone, Firestone Tire & Rubber Company of California

Frank A. LePage, Firestone Steel **Products Company** 

Arvid G. Lund, Firestone Natural Rubber & Latex Company

Edward J. Mara, Jr., Firestone Coated Fabrics Company

Robert W. Rice. Firestone Synthetic Fibers Company

Charles W. Rippey, Firestone Industrial Rubber Products Company

Thomas E. Salisbury, Firestone Synthetic Rubber & Latex Company

James R. Thomas, The Dayton Tire & Rubber Company

William A. Voorhees, Electric Wheel Company

Don L. Weihe, Hamill Manufacturing Company





George F. Karch



John F. Floberg

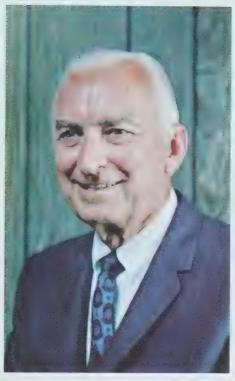


Herbert H. Wiedenmann

Earl B. Hathaway

Robert P. Beasley





Leonard K. Firestone





Edward F. Carter

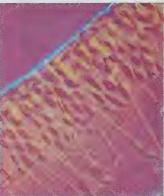


Mario A. DiFederico



Richard A. Riley









## Research and Development

"Possibly the most important tire development in the tire industry's history," is the description given by one writer to Firestone's achievement—the liquid-molded, cordless, cast tire announced during the year.

The development by Firestone scientists of new rubber compounds and a new manufacturing process made possible this revolutionary cast tire. The tire is formed by injecting liquid rubber into a mold and curing it. Minutes later a finished tire is removed.

A major feature of the cast tire is its complete uniformity which provides an extremely smooth ride.

Tires can also be made in any color just by adding the desired dye to the liquid rubber.

While this tire will not be available to the public until the late 1970's, the cast tire has already passed all Department of Transportation qualification tests and has high speed performance, durability, and resistance to impact characteristics equal to any tire currently being produced.

At the Company's central research laboratories, basic and applied research continues in diversified fields. A family of new inorganic rubbers destined for possible use in supersonic jets and for other space age applications is being developed.

Substantial progress was also made in the development of a new radiation process for rubber and plastics. The process offers great possibilities for reducing manufacturing costs and for developing new applications for Firestone products.

New dimensions in the field of microscopy have been opened by use of a new scanning electron microscope which is capable of producing three dimensional views magnified from 10 to 100,000 times.

A light microscope, the new scanning microscope and microscopic views of a plastic resin and cellulose fiber reinforcements are shown at the top of the page.

It was a year of many other new Firestone developments. The introduction of the Steel Belt 60 tire, the industry's first belted-bias passenger car tire, made with two strong steel belts under the tread, again demonstrated Firestone's leadership in the competitive rubber industry.

Another exciting steel cord passenger car tire, the Radial Steel Belt tire reached final development stages. This new tire combines the more stable radial construction principles with belts of strong steel wire. The radial tire, long accepted in Europe, is gaining popularity here because of its better wear characteristics, ease of handling and improved vehicle fuel economy.

The basic principle of the cantilever tire, Firestone's new concept in tire design announced in 1968, has been proven in passenger, race car, and aircraft service. The LXX Mach I aircraft tire went into commercial service on Boeing's 737 twinjet and is an innovation in the aircraft industry. These tires, with cantilever sidewall construction, are now being evaluated by development engineers for applications on trucks, mass transit systems, and off-the-highway equipment.

To strengthen the ties between the two technical and scientific departments, Clark E. Stair was named executive director of research and development.

Right—The cordless, liquid-molded tire generated worldwide interest and was cited by Industrial Research Inc. as one of the "100 most significant technical products of the year."











## **Tires**

The DeLuxe Champion Sup-R-Belt tire, the beltedbias tire introduced by Firestone for 1970 model cars, continued to win acclaim from motorists and auto manufacturers who adopted it during the year.

The tire is being produced with rayon plies and high modulus rayon belts as well as with the polyester-fiber glass combination.

A radically different tire, announced in 1970, was the Town & Country All-Position tire, also referred to as the Town & Country Asymmetrical tire, which provides greater traction on snow and ice than conventional winter tires. The tire has an asymmetrical tread pattern with a stable traction design on the outside edge for flotation in snow and better handling on dry pavement; on the inside edge there is an open traction grip design for maximum pulling power. This asymmetrical tread pattern makes the tire practical and advisable for use on all four wheels.

A new design of one of the Company's most popular tires, the "500" tire, was marketed during the year in the new popular 78 series used on 1970 and 1971 model cars; and the Wide Oval 60 Sup-R-Belt and the Sports 500 were introduced for the high performance car enthusiasts.

Forecasts indicate that 1971 shipments of all types of tires will increase approximately five per cent over 1970 as the economy builds up. Preparing for this up-swing in business, the tire division implemented several programs which have resulted in increased production capability.

To meet demands for the more complex tires of wider, belted-bias, and radial construction, a modernization program was initiated at all domestic tire plants. The program includes the addition of new tire assembly equipment and modifications of existing equipment to build the newer tires more efficiently.

With the introduction of the stronger steel cord tires, the production division installed a special steel cord fabric production unit. It has been designed to form individual strands of high tensile steel wire into precisely spaced sheets of steel cord rubberized fabric.

The new fabric unit is providing steel cord material for current tire production and for further development of steel-reinforced tires for passenger cars, buses, trucks, and off-the-highway equipment.

The tire division's largest automatic curing press was installed at the Des Moines, Iowa, plant. The new press is 20 feet high, weighs 90 tons and is capable of curing tires seven feet in diameter.

The unique Bead and Ply Assembly system is in the pilot production stage and is undergoing final engineering evaluation. This automated tire building process assembles the numerous parts of the tire much more efficiently and precisely than present methods.

The Company's multi-million dollar program to insure better environmental control continued with many new engineering projects in all plants. Over the years modern mixing systems have been installed at many Company tire plants and this program was continued in 1970. These units provide for automatic handling of carbon black from the receiving dock through the final mixing operation, thus eliminating the problem of carbon black emissions into the air.

The Company continued to emphasize quality and safety in tire manufacturing operations and to implement its extensive quality assurance and testing programs, Tire Uniformity Optimizers (TUO) were

Right—Giant tire and curing press are combined in this unusual photograph of a Super Rock Grip Deep Tread tire and the new 90-ton press in which it was cured at the Des Moines, lowa, plant.



installed in all U.S. tire plants. The TUO, an electronically-controlled inspection device, detects and corrects any minor irregularity in the tire as it rotates against a road wheel.

Further steps were taken to expand and modernize warehousing and distribution facilities. A large addition to the warehouse at the Salinas, California, plant is now under way. The facility will be equipped with an automatic towline which moves tires through the warehouse on electronically-operated carts.

During the year Firestone tires were selected for many unusual applications in the mass transit field.

One of the country's newest international jetports at Tampa, Florida, features the Transit Expressway System, a new concept in the function of moving people through airports.

The system utilizes automatically-controlled vehicles that connect boarding areas with the central processing terminal and eliminates a 1,000-foot walk. Passengers will cover this distance on an elevated monorail, in cars equipped with eight large Firestone truck tires, four guide tires, Firestone wheels, and Airide springs which provide a fast, smooth, and quiet ride. A similar system which also will use Firestone products is being developed for the Seattle-Tacoma Airport.

The Plane Mate, a vehicle designed to carry passengers from the airport terminal directly to large jet aircraft on the runways, went into operation and rides on our largest Duplex tires.

Still another application of Firestone tires and Airide springs is on Sky-Kar Corporation's Transivator, a suspended monorail being developed in Texas.

Another area where Firestone excelled during the year was in auto racing. Al Unser won the Indianapolis 500 mile classic — the 47th time the Indianapolis winner was on Firestone tires. He also won the United States Auto Club (USAC) driving championship on Firestone tires. In all, 13 of the 18 USAC championship races were won on Firestone tires.

In the Sports Car Club of America's Trans-American Sedan Series, seven of the 11 races were won on Firestone tires. In major drag racing events our Drag 500 tires equipped many champions' cars.

Firestone swept the field in international auto racing events and the winner of the world driving title rode to victory on Firestone tires. Ten of the 13 Grand Prix events were won on Firestone racing tires. In the World Manufacturers championship for Group 4 and 6 sports cars, nine of 10 endurance races, including 24 hours of Daytona and the 12 hours of Sebring, were won by machines equipped with Firestone racing tires.

#### **SEIBERLING**

At The Seiberling Tire & Rubber Company environmental control programs took high priority as they did in all Company plants. The installation of oil-fired boilers to replace coal-fired generating equipment was completed and facilities for bulk carbon handling were added. Modernization of compounding, stock cutting, and tread tubing operations are also nearing completion at the Barberton, Ohio, plant.

Seiberling added several new tires including the Supreme Dynaguard and the "200" tire, both of belted-bias construction using improved rayon cord. The newly designed asymmetrical Four Seasons winter tire was marketed in belted-bias construction as well as in the conventional four ply construction.

A large new warehouse was opened in Los Angeles to supply inventory and improve service to dealers and customers on the West Coast.

#### **DAYTON**

The Dayton Tire & Rubber Company again set production records in 1970 and sales of its Dayton brand, private, and special brand tires increased.

The division's new plant in Oklahoma City, Oklahoma, went into operation during the year. The plant, with a capacity of 17,000 tires per day, is one of the most modern in the country and was designed to meet all environmental control standards. Expansion projects were also completed at the Dayton, Ohio, plant.

Backed by an aggressive development and marketing program, Dayton continued its penetration of the vast replacement tire market. During the year the division introduced several new tires including the 70 series Dayton Sport Belted tire with raised white letters, and a new heavy service truck tire.



Left—Passengers at Tampa, Florida's, new jetport travel long distances between terminal and boarding areas in quiet, automated cars equipped with Firestone tires, shown in lower portion of the photograph.

Lower Left—Al Unser won the Indianapolis 500 and the 1970 United States Auto Club driving championship while riding on Firestone tires.

Below—The industry's first steel belted-bias tire, the Steel Belt 60, was introduced for the high performance car market.

Lower Right—The Wide Oval 60 tire continues to gain in popularity and is original equipment on several 1971 model cars.







Dayton maintained its position as one of the major suppliers of original equipment tires for the growing mobile home and travel-trailer industries.

#### **MARKETING**

To increase sales in the growing tire market, the Company expanded its dealer and retail store operations; and many outlets were relocated or redesigned to keep pace with modern merchandising methods.

With the growing popularity of high performance cars, the Company has designed attractive and colorful High Performance Centers for use in retail outlets. These merchandising displays incorporate in one area of the store the entire line of wider, bolder, high styled tires and wheels.

Thousands of dealers and stores continue to take advantage of sales opportunities in home and auto supplies. More than 7,000 different non-tire items such as radios, television sets, major appliances, power mowers, and bicycles are sold through our retail stores.

In sales to domestic car manufacturers, the Company continued as a supplier to Ford, General Motors, and Chrysler and also this year became a supplier to American Motors.

Fidesta, the leased department division, and other private brand segments of the replacement market continued to grow. Firestone is a major tire supplier to many leading oil companies and several mass distributors of private brand tires.

An aggressive advertising program was directed to all media including television, radio, newspapers, magazines, and trade journals.

The Firestone name reached millions of potential customers through national and international telecasts of football, basketball, baseball, golf, and bowling tournaments and on national television variety shows. During the year two of the Company's TV commercials won CLIO awards at the American TV and Radio Commercial Festival.

Shipments of mobile home tires have increased 400 per cent since 1961. The Dayton Tire & Rubber Company is a major tire supplier for this growing market and for other recreational vehicles.

A new merchandising display—the High Performance Center—is appearing in retail outlets throughout the country. The Center features the entire line of high performance tires and custom wheels.













## **Diversified Operations**

Firestone's diversified products divisions produce more than 44,000 different products in rubber, metals, plastics, chemicals, and textiles. The divisions maintained a high level of sales to outside customers as well as to Firestone tire plants.

#### **RUBBER PRODUCTS**

Foam products continued to find widespread acceptance in a number of areas. With the growth in this field, the Firestone Foam Products Company was established as a separate division during the year, and L. R. Brodeur was named president of the division.

Facilities for polyurethane foam production in Milan, Tennessee, and Corry, Pennsylvania, were expanded and production capacity of continuously foamed urethane exceeded a quarter billion annual board feet. The plants produce foams for use in furniture, automotive seating, bedding, and for other comfort uses.

Flame-retardant foam rubber materials are a major product of the Fall River, Massachusetts, plant and further development of foam rubbers with improved safety features was continued.

Firestone Industrial Rubber Products Company continues to market a full line of custom molded rubber parts, Airide springs, and Airmount pneumatic suspensions. These products are in use on all highway and transit buses made in the United States and on other vehicles which haul fragile cargoes. Airmount pneumatic springs also play an important role in space age activities as vital components in ground testing equipment for the Apollo rocket.

The division's plant at Newport, Tennessee, is devoted exclusively to production of semi-pneumatic tires for lawn mowers, golf carts, and juvenile vehicles.

A new plant for production of automotive hose is under construction in Prescott, Arkansas, and when completed in 1971, will give the division a dominant position in curved radiator hose manufacturing. Continued improvements in customer service and distribution operations resulted in increased sales at the World Bestos Company in New Castle, Indiana. Manufacturing facilities for a new line of disc brake pads were completed and the plant's modernization program continues to improve quality and lower production costs.

Development of products for pollution control and vehicle safety took the spotlight at Firestone Coated Fabrics Company during 1970.

To reduce the hazard of fires in auto crashes, the division developed and is now test marketing a new fuel concept for cars similar to those which have proved so effective in preventing fires in racing cars and aircraft.

The division is a leading producer and marketer of Fabridam inflatable gates used in water control; Fabritank collapsible containers for oil, fuel or water; Fabri-Dome air supported roofing for tanks and reservoirs; and hydraulic linings used in reservoirs or for controlling liquids. All these products are being used in water pollution control projects as well as for storage, protection, or flood control purposes.

#### **METAL PRODUCTS**

Demand for metal products including truck wheels, rims, stampings, and stainless steel containers remained at a high level during 1970.

Production and sales of stainless steel containers were the greatest of any year in the 52-year history of the division and a large warehouse addition was completed at Spartanburg, South Carolina, which will allow for more effective production scheduling and warehousing.

Firestone Steel Products Company's new XL truck wheel for medium trucks is undergoing final testing and will be marketed in 1971. The wheel incorporates new safety features and increased load capacity.

In Wyandotte, Michigan, a new office building was opened and new equipment which provides for more efficient cleaning of raw steel was installed. This is a major step in the plant's environmental control program.

The London, Ontario, plant has become the leading Canadian producer of truck rims and wheels.

In the defense products division, production continued on government contracts for the TOW missile warhead, and research and engineering studies proceeded on a shaped charge warhead for the new Dragon missile.

Reactivation of the Ravenna Army Ammunition plant, a shell loading facility operated for the government, was completed during the year and the plant is producing shells, cartridges, and primer percussion elements for artillery shells.

Ground was broken in May for a modern new foundry at the Electric Wheel Company in Quincy, Illinois. The new building has been designed to comply with all state and federal pollution control laws and will use an electric coreless induction furnace for melting metal. This is the third major environmental control project at Quincy in the past several years.

Electric Wheel maintained its leadership in supplying rims, wheels, hubs, castings, spindles, stampings, wagons, and trailers to the agricultural, industrial and construction equipment industries.

New products introduced were a one-piece drop center rim for off-the-road equipment; double and single trailers for transporting snowmobiles; and running gear for cargo handling equipment used at airports.

One of the most significant projects of the year in the automotive safety field was unveiled by Hamill Manufacturing Company. The division developed a passenger protection system which would be activated automatically in the event of a collision to keep passengers from being hurled forward or sideways.

The new system offers several advantages over others being developed since it uses a blanket to restrain occupants; presents no noise problems; is effective in rollover situations; and stays in place after the initial collision providing protection through subsequent events.

Work on this concept is progressing with major auto manufacturers and is being coordinated with government departments concerned with safety. It is expected to be an important factor during the 70's when passive restraints become mandatory on all cars.

Hamill's new concept in child safety seating for automobiles is now in the test market stage. When not in use in the car, the padded seat which is called "Protecta-Tot" child safety seat, can also be used as a youth chair.

#### **PLASTICS**

Firestone Plastics Company, with headquarters in Pottstown, Pennsylvania, maintained its basic position in the film and sheeting business. The division added facilities for production of PVC resins and latices at the Pottstown and Perryville, Maryland, plants increasing capacities on these products to a quarter of a billion pounds annually.

Among new products developed were flame-retardant vinyl latices, blending resins, and solution resins.

Forecasts indicate that the greatest growth of all plastics during the 70's will be in the vinyl polymers. Firestone Plastics, with its technical capabilities, expansion and modernization programs now under way, is prepared to take advantage of these growth opportunities during the coming years.

J. M. Cornely became division president succeeding Roger S. Firestone who died suddenly last January.

#### **CHEMICALS AND TEXTILES**

It was a year of growth and increased acceptance for products of Firestone Synthetic Rubber & Latex Company.

In addition to supplying rubber for Firestone tires and other rubber products, the division sold raw materials to many other industrial customers including the adhesives, carpeting, flooring, paper, and plastics industries.

During the year Firestone completed a major expansion of Stereon synthetic rubber facilities at the Lake Charles, Louisiana, plant. Called the rubber of the future, this rubber copolymer is expected to gain a greater percentage of the synthetic market during the next few years. Other expansions were also completed at Orange, Texas; Akron, Ohio; and Port Jerome, France.

Extensive environmental control programs were completed in Orange, Lake Charles and Akron to improve effluent disposal and to prevent air pollution.

Right—Polyurethane foam moves through a splitting operation at the Milan, Tennessee, plant. Production was expanded to meet growing demands for this cushioning material.



Right—At the Firestone Plantations in Liberia, a third extrusion dryer like the one shown is being installed to speed up rubber processing.

Below—A unique passenger protection system, which is activated automatically in case of auto collision, was demonstrated for government and safety officials during the year by Hamill Manufacturing Company.

Lower Right—Fabritank collapsible containers are used to store fuel supplies for oil drilling equipment operating on Alaska's North Slope.







Introduction of new nylon resins and yarns for the fashion, home furnishings and automotive industries highlighted the year at the Synthetic Fibers Company.

Three new Nytelle textile nylon products for use in texturized hosiery were developed and marketed; a special nylon resin was developed for the automotive industry's use in gasoline emission control devices; and a new resin was marketed for carpeting customers who produce colorfast yarns.

Production capacity at the Hopewell, Virginia, plant was increased for nylon textile and tire yarns to meet anticipated needs in these areas.

Textile plants at Gastonia, North Carolina; Bowling Green, Kentucky; and Bennettsville, South Carolina, were expanded to keep up with tire plant requirements for nylon, rayon and polyester cord fabric.

In line with environmental control programs, coalfired boilers at Bennettsville were replaced during the year with oil-fired equipment.

Programs to increase capacity for all types of tire cord materials, including steel cord, are planned.

#### NATURAL RUBBER

The Firestone Natural Rubber & Latex Company set new sales and production records for 1970 as consumption of natural rubber continued at high levels throughout the world.

During the year the division, which operates plantations in Liberia, Ghana, Brazil, Republic of the Philippines and Guatemala, processed a record 133 million pounds of latex and crepe rubber. Sales to the carpeting and dipped goods industries in Europe and the U.S. also increased.

The Liberian plantations continued to be the leading supplier of natural latex to the United States, and replanting programs in Liberia were expanded to replace older trees with higher-yielding varieties. Plantations in Brazil and Ghana were also enlarged.

A modern new latex terminal, operated by the Natural Rubber division, was opened in Savannah, Georgia, during the year. This new facility, with a capacity of 3,500,000 pounds of liquid latex, is enabling the division to provide better service and improved distribution facilities for customers.



## **International Operations**

Foreign markets continue to offer unlimited growth opportunities, and Firestone International, with its worldwide sales and production facilities, is in an excellent position to serve these expanding markets.

The Company's international operations are oriented principally to the motor vehicle industry; and during the past five years vehicle registrations outside the U.S. have been growing at 9.3 per cent per year — more than double the U.S. rate.

Today there are 229 million vehicles on the roads of the world, of which 124 million or 54 per cent are outside the United States. By 1975 it is estimated that there will be 316 million vehicles in the world, of which 196 million or 62 per cent will be outside the U.S.—a 60 per cent increase in the next five years.

Firestone is prepared to take advantage of sales opportunities in this vast market. Expansions have been completed or are planned in virtually all overseas factories, and careful studies are under way for new plant locations and new marketing channels.

During the year Richard F. deLima was named president of the Firestone International Company succeeding M. A. DiFederico, who was elected vice president, tire production, and a director of the parent company.

#### **EUROPE**

Growth in the automotive market in Western Europe and the United Kingdom has been especially significant. The number of vehicles on streets and highways there is expected to reach 72 million by the end of this year. In five years this figure is expected to increase to nearly 100 million vehicles.

To meet the needs of this fast growing market, major capacity expansion programs were completed at plants in Portugal, United Kingdom, Sweden, and West Germany. Other expansions are under way in France and Italy.

Radial tires now represent 56 per cent of the total tires sold in Europe and it is estimated that within five years radial tires will account for 83 per cent of the total European tire market.

To take advantage of this growing market, the Cavallino series of radial passenger car tires was expanded by the introduction of the Cavallino Wide Oval Radial tire for high performance cars and the Cavallino tire for family cars. In addition, the T-1000 steel cord radial truck tire was also added to the line, and further innovations will emerge from the accelerated development program of the Europa S.p.A. technical center located in Rome.

In one of the most rugged tests ever devised by the Europa testing division, the Town & Country radial tire came through with flying colors. Tests were run on the 11,354-foot Jungfraujoch Glacier in Switzerland, marking the first time cars had ever been on the ice plateau. Photographs of these test runs are shown at the top of the page.

To increase its share of the replacement tire market, the Company opened or acquired many new tire outlets in the United Kingdom and plans are under way to introduce the retail store program elsewhere.

Further strengthening of the marketing network was accomplished as several major oil companies began distribution of Firestone tires through service stations.

#### AFRICA, ASIA, SOUTH PACIFIC

In July His Excellency Mzee Jomo Kenyatta, president of Kenya, and Raymond C. Firestone, Chairman of the Company, laid the foundation stone for a new tire plant in Nairobi.

Firestone East Africa (1969) Ltd., owned by Firestone, the Industrial & Commercial Development Corporation, and the Development Finance Company of Kenya, Ltd., will be Kenya's first tire manufacturing plant.

Firestone Ghana Ltd., a tire manufacturing facility in Bonsaso, reached full capacity during the year. In addition to tires and tubes, the plant is also producing tire repair and retreading materials.

Major plant expansions were completed, are under way, or contemplated at plants in India, New Zealand, Thailand, South Africa, Republic of the Philippines and Australia.

#### WESTERN HEMISPHERE

Sales of Firestone products were strong throughout Central and South America in 1970.

Plants in Brazil and Venezuela completed expansions for production of radial passenger car tires to meet growing demand for this type of tire in South America.

Firestone de la Argentina S.A.I.C. is the exclusive supplier of tires for the El Chocon-Cerros Colorados dam complex now under construction in Argentina. The mammoth hydroelectric power project is scheduled for completion in 1978. Firestone is supplying tires and service for more than 250 pieces of off-the-highway equipment and trucks.

At the tire plant in Buenos Aires an expansion and modernization program is in progress.

#### **CANADA**

Firestone Tire & Rubber Company of Canada, Ltd., became the major tire supplier for the largest civil works project in North America—Churchill Falls hydroelectric power development in Labrador. It is the largest construction job ever serviced by a Canadian tire company and four service trucks are on various sites in the Labrador wilderness to supply and maintain tires on 300 pieces of equipment.

The Canadian company also continued as a major supplier of large truck and off-the-highway tires for forestry and mining projects throughout Canada.

A major expansion of operations now under way at the Joliette, Quebec, plant will increase capacity there by 50 per cent. Other production increases were made at Calgary, Alberta, and at the synthetic fibers and textiles plant in Woodstock, Canada.

A leveling of the Canadian economy increased competitive activity in the retail tire market. However, Firestone met the challenge with the opening of 13 new stores bringing the total to 149.



European sales operations continued to expand during the year. In Paris, a Firestone-France truck pauses at the Eiffel Tower.

Right—Firestone of Canada is the major tire supplier for the largest civil works project in North America—the Churchill Falls hydroelectric power development now under construction in Labrador.







## **Meeting Corporate Responsibilities**

In 1970 Firestone continued to take direct and effective action toward achieving its goal of excellence in environmental engineering.

Because it shares the concern about the quality of our land, air, and water resources, the Company has set up an ecological committee to study environmental problems and to work for solutions to eliminate them. During the year considerable progress was made in improving environmental factors in manufacturing operations.

The most significant development was the opening of the nation's first pilot plant for pollution-free disposal of scrap tires. Company scientists and engineers developed the new method in an effort to reduce this solid waste pollution.

The system utilizes a thermal reactor to convert scrap tires into useable chemicals and raw materials. These materials can be recycled into the production operation in a variety of manufacturing and chemical processes.

If the pilot plant, located in Akron, continues to prove satisfactory, the Company plans to construct other facilities around the country which could absorb the total amount of tires scrapped each year.

Firestone is actively engaged in research, development and manufacture of anti-pollution products and processes not only for its own plants, but also for areas outside its own operations. These developments are being shared with the public and with concerned government agencies.

Leonard K. Firestone, a member of the Company's Board of Directors, was appointed by President Nixon to serve on the Rubber Sub-Council of the National

Industrial Pollution Control Council. The Council is developing policies and programs for improvement of environmental quality.

In other areas of corporate responsibility, Firestone continued its participation in many social, educational, and youth programs.

Aid to education included grants to colleges, fellowships, matching gifts programs to employees' schools and scholarships for employees' children. Since the Company scholarship program was started 17 years ago, a total of 521 scholarships have been awarded.

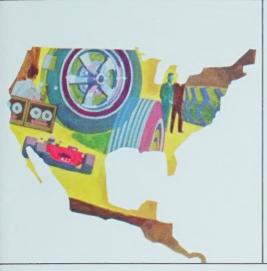
The Company expanded its participation in national and local job programs for the unemployed and included more than simply providing equal employment opportunity.

In Texarkana, Arkansas, disadvantaged persons were trained and employed to assist in the manufacture of coated fabrics products.

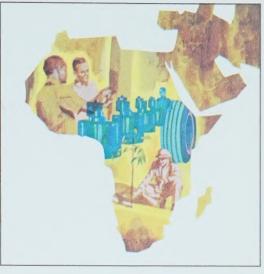
In cooperation with the National Alliance of Businessmen, Firestone again provided summer jobs for many needy young people throughout the country.

Youth training programs such as Distributive Education (DE) were also continued. In the DE program, high school seniors interested in merchandising attend classes for a half-day and receive on-the-job training in Firestone stores for the remainder of the day. These programs not only help train young people, but also provide the Company with qualified personnel for store operations.

Other youth-oriented programs including Future Farmers of America, 4-H, Junior Achievement, and the National Student Traffic Safety Committee received continuing Company support.







Nairobi, Kenya

#### **DOMESTIC FACILITIES**

#### **Tire and Tube Plants**

Akron, Ohio
Albany, Georgia
Barberton, Ohio
Bloomington, Illinois
Dayton, Ohio
Decatur, Illinois
Des Moines, Iowa
Los Angeles, California
Memphis, Tennessee
Oklahoma City, Oklahoma
Pottstown, Pennsylvania
Russellville, Arkansas
Salinas, California

#### **Diversified Products Plants**

Akron, Ohio
Almont, Michigan
Bad Axe, Michigan
Bennettsville, South Carolina
Bowling Green, Kentucky
Corry, Pennsylvania
Detroit, Michigan
Fall River, Massachusetts
Gastonia, North Carolina
Hopewell, Virginia
Imlay City, Michigan

Lake Charles, Louisiana Magnolia, Arkansas Milan, Tennessee New Castle, Indiana Newport, Tennessee Noblesville, Indiana Orange, Texas Perryville, Maryland Prescott, Arkansas Quincy, Illinois Romeo, Michigan \*Ravenna, Ohio, Army Ammunition Plant Spartanburg, South Carolina Trenton, New Jersey Ubly, Michigan Washington, Michigan West Caldwell, New Jersey

#### **Tire Test Centers**

Wyandotte, Michigan

Columbiana, Ohio Ft. Stockton, Texas \*Operated for U. S. Government

#### FOREIGN FACILITIES

Alcochete, Portugal
\*Askim, Norway

Bangkok, Thailand \*Bareilly, India Bari, Italy Bethune, France \*Bilbao, Spain Bizerte, Tunisia Bombay, India Bonsaso, Ghana Boras, Sweden Brentford, England, United Kingdom Brits, South Africa Buenos Aires, Argentina \*Burgos, Spain Butterworth, Malaysia Calgary, Alberta, Canada Christchurch, New Zealand \*Hamburg, West Germany Hamilton, Ontario, Canada Joliette, Quebec, Canada Kuala Lumpur, Malaysia London, Ontario, Canada Manila, Republic of the Philippines Melbourne, Australia \*Mexico City, Mexico Midland, Ontario, Canada

\*Osaka, Japan Penetanguishene, Ontario, Canada Perth, Australia Port Elizabeth, South Africa Port Jerome, France \*Pratteln, Switzerland \*Reinsdorf, West Germany Rio de Janeiro, Brazil \*Saint Nabord, France San Jose, Costa Rica Sao Paulo, Brazil Singapore, Singapore Sydney, Australia Tvaaker, Sweden Valencia, Venezuela Viskafors, Sweden Woodstock, Ontario, Canada Wrexham, Wales, United Kingdom

#### **RUBBER PLANTATIONS**

Bonsaso, Ghana
Cavalla, Liberia
Harbel, Liberia
Itubera, Brazil
Makilala, Republic of the Philippines
Retalhuleu, Guatemala,
Experimental Plantation

ay \*Montevideo, Uruguay \*Firestone Associated Factory









YOUR SYMBOL OF QUALITY AND SERVICE